EXECUTIVE SUMMARY

DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT ON LAKE OKEECHOBEE REGULATION SCHEDULE LAKE OKEECHOBEE, FLORIDA

The U.S. Army Corps of Engineers (Corps) is proposing to implement a new water regulation schedule for Lake Okeechobee. This Supplemental Environmental Impact Statement (SEIS) supports the proposed operational changes to the current Water Control Plan. The SEIS explains the recommended Water Control Plan changes, and provides technical information explaining the basis for the recommendation. It includes a description of its impacts for various purposes, and the comparisons with alternative plans or changes and their effects. The Water Control Plan will be finalized after the public involvement process associated with its development or change is complete.

Need or Opportunity.

The need for a new regulation schedule has been clearly established by the continued deterioration of Lake Okeechobee's littoral zone and both the Caloosahatchee and St. Lucie estuaries. Lake regulation schedules trigger various management activities according to different lake levels. As past experience has shown, the current regulation schedule, Water Supply and Environment (WSE), limits some releases from Lake Okeechobee during periods when water levels are high. Higher lake levels contribute to poor ecological conditions within the lake, and can potentially result in undesirable high volume releases to the estuaries. There is also the need to ensure public health and safety as it pertains to the Lake Okeechobee Regulation Schedule (LORS) and the Herbert Hoover Dike (HHD) levee system that surrounds the lake.

Major Findings and Conclusions.

The Lake Okeechobee Regulation Schedule Study (LORSS) was initiated to address continued high lake levels, estuary ecosystem conditions, and lake ecology conditions that occurred since 2003. At the forefront of the LORSS were back to back historically significant hurricane seasons of 2004 and 2005 and the recognized integrity issues of the HHD. High lake stages can trigger large regulatory releases to Lake Okeechobee's two major outlets, the St. Lucie and Caloosahatchee Estuaries, which can result in adverse environmental effects to these ecosystems. Extended periods of high water levels in Lake Okeechobee have also resulted in significant loss of valuable habitat in the lake's littoral zone and marsh communities.

All alternatives evaluated were based on criteria for managing the lake at a lower level than the current regulation schedule. The issue of public health and safety based on the integrity issues of the HHD was a key factor in the decision making process to select a Preferred Alternative. For a multiple purpose lake, such as Lake Okeechobee, a

regulation schedule attempts to balance competing objectives including flood control, water supply, navigation and enhancement of fish and wildlife resources. Thus, managing for better performance of one objective often leads to poorer performance in satisfying competing objectives. Often trade-offs exist between the objective of managing the lake water levels for the health of the littoral zone and the objective of reducing high volume flows to the estuaries.

Alternatives. There have been various regulation schedules adopted in the past. The current schedule is Water Supply/Environment (WSE) which was recommended for implementation in 2000 upon completion of an Environmental Impact Statement (EIS) and Record of Decision (ROD) prepared by the Corps, Jacksonville District. The regulation schedules studied in this report do not require structural modifications and were developed by the Corps and the South Florida Water Management District (SFWMD). Performance measures (PMs) and objectives were developed by an interagency group of concerned Federal and State agencies. These PMs and objectives were used to compare the various alternatives using the South Florida Water Management Model (SFWMM). In addition to the current regulation schedule (WSE), five other alternative regulation schedules were evaluated in detail. The alternatives are referred to in the SEIS as: 1bS2, 1bS2-m, 2a, 2a-m and 4.

<u>Preferred Alternative</u>. The alternative regulation schedule (1bS2-m) recommended in this report represents the best operational compromise at this time to improve the environmental health of certain major Central and Southern Florida (C&SF) ecosystems, while providing for public health and safety as it pertains to the LORS and the impact it has on the safe operation of the HHD. Extended periods of high water levels in Lake Okeechobee have resulted in significant loss of valuable habitat in the lake's littoral zone and marsh communities which can only be restored by operating the lake under a lower schedule.

Issues Raised by the Public and Agencies. The following issues were identified during scoping and by the preparers of this Supplemental Environmental Impact Statement (SEIS) to be relevant to the proposed action and appropriate for detailed evaluation: Public Health and Safety, Flood Control, Water Supply, Impacts to Lake Okeechobee, Everglades and Estuarine Biota, Endangered and Threatened Species, Water Quality and Navigation.

<u>Areas of Controversy</u>. There will always be a level of controversy with any issue related to water management in south Florida. Regarding the proposed action, few issues remain unresolved with various commenting agencies and other non-governmental groups. However, stakeholder input obtained during the Planning phase of the study indicates much concern over the health of the Caloosahatchee Estuary. Stakeholders representing the Caloosahatchee Estuary have concerns that the alternatives analyzed show minimal benefits, if any, for the estuary.

<u>Unresolved Issues</u>. The Corps and the U.S. Fish and Wildlife Service (USFWS) are engaged in formal consultation under the Endangered Species Act (ESA) to identify and

evaluate the effects to the Everglade snail kite, wood stork and Okeechobee gourd. An initial determination of "may affect" was made for these species, and issuance of a Biological Opinion by the USFWS is forthcoming.